

California Energy Commission

## STAFF REPORT

# LOCALIZED HEALTH IMPACTS REPORT

Addendum 1 for a Project With a Location Change  
Awarded Funding Through the Alternative and  
Renewable Fuel and Vehicle Technology Program  
Under Solicitation PON-14-608 – Natural Gas  
Fueling Infrastructure

California Energy Commission

Edmund G. Brown Jr., Governor



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# California Energy Commission

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# ADDENDUM 1

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The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-14-608* was posted October 9, 2015 (CEC-600-2015-013)<sup>1</sup>. This addendum uses the same approach to assess the localized health impacts for a project with a location change. The City of Sacramento proposes to change the location of its originally proposed compressed natural gas (CNG) fueling station. The original and newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators<sup>2</sup> (further detail in Appendix A). Project specifications and output for the newly proposed station location are comparable to the original proposal.

**Table 1: Original and New Site Locations for the City of Sacramento, Along With Environmental Justice Indicators**

Original Site Locations	New Site Locations	EJ Indicator for Original Location	EJ Indictors for New Location
City of Sacramento 918 Del Paso Road Sacramento, CA 95834	City of Sacramento 5730 24 <sup>th</sup> Street Sacramento, CA 95822	Poverty and Unemployment	Poverty and Unemployment

Source: California Energy Commission staff

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1 Brecht, Patrick, Jennifer Allen, Lindsee Tanimoto. 2014. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2015-013.

2 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.3 percent (2009-2013), (iii.) city's unemployment rate exceeds California's unemployment rate of 5.5 percent as of September 2016, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

## Air Quality and EJ Indicators

Both the original and the newly proposed CNG fueling station locations are in nonattainment zones for ozone, particulate matter (PM<sup>3</sup>) 2.5, and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method<sup>4</sup>. According to staff assessment, Sacramento is considered a high-risk community.

**Table 2: EJ Indicators Compared With California**  
Yellow highlighted percentages indicate EJ indicators

	Below Poverty Level (2009 – 2013)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (September 2016)
California	15.3%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	5.5%
EJ Indicators	>15.3%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>5.5%
Sacramento	22.3%	14.6%	1.1%	18.3%	26.9%	7.5%	10.6%	5.7%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000.06.00> and [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)

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<sup>3</sup> "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

<sup>4</sup> California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

## Location Analysis and Community Impacts

No additional emissions are expected as no net increase of CNG-burning vehicles is part of this project. Transport of the fuel is via Pacific Gas and Electric Company transmission pipelines located underground. No surface transportation of fuel will be used. City-owned CNG vehicles take fuel at a private fueling concern located off-site. This proposed project will bring the fueling process to a city-owned and operated property. All vehicles will be fueled using time-fill fueling devices that lock into the fuel intakes on the vehicles to eliminate any leakage. The only form of significant emissions possible would be at the defueling station where a vehicle can be defueled by venting to the atmosphere in case of some emergency or other incident that would require a vehicle to be defueled immediately. No increase in traffic in and around the facility is anticipated as part of this project since the vehicles that will use this facility park overnight in the same location.

The assessment remains unchanged from the original *LHI*. The environmental justice indicators are the same along with design, specifications, anticipated output, and impact to vulnerable populations. The anticipated impacts to the community where the CNG fueling station is to be located remain positive in terms of cleaner air and anticipated greenhouse reductions.

# APPENDIX A:

## Localized Health Impact Report Assessment Method

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Based on the California Energy Commission's interpretation of the *California ARB AQIP Guidelines*, this *LHI Report* assesses the potential impacts to communities as a result of the projects proposed by the ARFVTP. This report is prepared under the *California ARB AQIP Guidelines, California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

This *LHI Report* is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This *LHI Report* includes staff application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks<sup>5</sup>.

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (i.) exposure to air pollution, (ii.) cancer risk, (iii.) ozone concentration, (iv.) frequency of high ozone days, (v.) race/ethnicity, (vi.) poverty level, (vii.) home ownership, (viii.) median household value, (ix.) educational attainment, and (x.) sensitive populations (populations under 5 years of age or over 65 years of age).

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<sup>5</sup> California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high risk communities, environmental justice (EJ) indicators for locations of the freight transportation projects at California seaports are compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high- risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

*Part 1:*

- Communities located in nonattainment air basins for ozone, PM 10 or PM 2.5

*Part 2:*

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
  - A minority subset represents more than 30 percent of a given city's population.
  - A city's poverty level exceeds California's poverty level.
  - A city's unemployment rate exceeds California's unemployment rate.
  - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.